



Charles County Department of Emergency Services STANDARD OPERATING PROCEDURES

Section 400 - Emergency Operations

General Emergency Operations - 401.00		
S.O.P. # 401.17	Specialty Emergency Vehicles & Trailer Towing Operations	PAGE: 1 OF 10
EFFECTIVE: 12/16/2003	Authorized: John Filer, Chief	
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401.17.01 Purpose

The purpose of this SOP is to provide employees of the Charles County Department of Emergency Services general procedures and policies for the safe operation and riding of specialty emergency vehicles, safe towing and operation of trailers as well as; for the prevention and reduction of accidents and injuries of public safety personnel and the public.

401.17.02 General

It is the responsibility of every employee of the Charles County Department of Emergency Services to respond safely, rapidly and efficiently to requests for emergency services. These policies and procedures are designed to conform to the motor vehicle laws as set forth by the State of Maryland and United States Department of Transportation (DOT). This SOP is an augmentation not a replacement to the *Charles County Government Risk Management & Safety Manual*. Employees should review and comply with all policies and protocols as set forth and stated in the aforementioned manual.

401.17.03 Applicability

This SOP applies to all uniformed and non-uniformed personnel.

401.17.04 Definitions

1. **Approved Driver:** An employee who meets all of the necessary requirements and possesses the training to be authorized to independently operate a county vehicle.
2. **ATV:** All-Terrain Vehicle
3. **ATV Safety Institute:** The All-Terrain Vehicle Safety InstituteSM (ASI), a not-for-profit division of the Specialty Vehicle Institute of AmericaSM (SVIA), was formed in 1988 to implement an expanded national program of all-terrain vehicle (ATV) safety education and awareness. ASI's primary goal is to promote the safe and responsible use of ATV's, thereby reducing accidents and injuries that may result from improper ATV operation by the rider.



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4. **Bumper Mount Hitch:** The most basic trailer hitch for a passenger car, SUV, or truck is simply the vehicle's bumper. Most truck bumpers and many SUV bumpers come equipped with a hole in the center of the bumper sized to accommodate a standard trailer ball. If your trailering needs are limited to less than 1,000 pounds and 100 pounds of tongue weight, this style of hookup and some basic wiring may be all that you need. Although some bumpers are rated for towing, use caution and never exceed the capacity of the lowest rated towing component.
5. **Class 3 Receivers/Hitch:** The most common receiver class installed on full-size pickup trucks and SUVs. If a full-size truck is equipped with a tow package, it's probably a Class 3. These receivers have a 2-inch square receiver tube. Class 3 receivers can handle up to 8,000 pound trailers and 800 pounds of tongue weight with a weight carrying ball mount, or up to 12,000 pounds and 1,200 pounds of tongue weight with a weight distributing hitch.
6. **Class 4-5 Receivers/Hitch:** These receivers are the heaviest-duty trailer hitches that can be installed at the rear of a tow vehicle. A Class 4 hitch can carry 10,000 pounds and 1,000 pounds of tongue weight with a weight carrying hitch, or up to 12,000 and 1,200 pounds with a weight distributing hitch. Class 5 receivers can carry up to 14,000 pounds and 1,400 pounds tongue weight. Class 4 & 5 receivers use the same 2-inch receiver tube as a Class 3, but some Class 5 receivers use a 2 ½-inch receiver tube.
7. **Due Regard:** All employees must drive with "due regard" for the safety of others using the highways. State vehicle codes provide and give special privileges to the operators or emergency vehicles; however, this does not relieve the operator from the duty and responsibility to drive with "due regard" for the safety of others.
8. **DOT:** Department of Transportation, the United States federal department that institutes and coordinates national transportation programs; created in 1966.
9. **EVOC:** Emergency Vehicle Operations Course
10. **FAA** - Federal Aviation Administration
11. **Fifth Wheel and Goose Neck Hitch:** These heavy-duty hitches mount in a pickup or commercial truck bed forward of the rear axle. Fifth wheel hitches are similar in design to those used by commercial 18-wheeler tractor-trailer rigs. Fifth wheel trailer capacities range from 16,000 to 30,000 pounds and up to 5,000 pounds of pin weight (tongue weight), depending on the design of the hitch, and the rating by the manufacturer. Fifth wheel hitches are commonly used in large campers, or travel trailers, and car haulers. Fifth wheel trailers are prized for their ease of maneuverability and stability, which is why they're a common choice for large campers. Most fifth wheel hitches have some "pivot" capability to absorb bumps and contours of the road. Fifth wheel hitches are the only type of hitch where the coupling device is part of the hitch and not the trailer.



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12. **FLETC:** Federal Law Enforcement Training Center
13. **Gross Vehicle Weight (GVW):** This is the vehicle's standard curb weight, plus an allowance for a standard amount of luggage, gas and passengers, as predicted by the manufacturer. The vehicle's actual weight will vary depending on how much luggage, gasoline, and passenger weight you have actually placed in the vehicle, so the GVW is an approximation.
14. **Gross Vehicle Weight Rating (GVWR):** This is the maximum safe actual weight of a vehicle. If you exceed this weight, the vehicle's engine, transmission, brakes, and so on will be stressed beyond their design limits.
15. **Gross Combination Weight Rating (GCWR):** This is the maximum safe weight of the combined vehicle and trailer. This weight includes all people, luggage, and other material. If your combined towing setup exceeds this weight, your vehicle's engine, transmission, brakes, and so on will be stressed beyond their design limits.
16. **International Police Mountain Bike Association (IPMBA):** IPMBA offers internationally recognized certification and training courses. These courses were developed by experts in the fields of police and EMS cycling, and are used by public safety agencies around the world.
17. **National Safety Council:** An independent safety based training organization whose mission is save lives and prevent workplace injury through education and activism.
18. **Negligence:** An individual's failure to exercise reasonable care under the circumstances.
19. **NFPA:** National Fire Protection Association.
20. **On-duty:** Status indicating a CCDES employee is in pay status, performing a work substitution, or otherwise officially representing CCDES.
21. **OSHA:** Occupational Safety and Health Administration, a government agency in the Department of Labor to maintain a safe and healthy work environment.
22. **Special Emergency Response Vehicle (SERV):** A vehicle outside of the traditional classification of emergency response vehicles. Types of these SERV's include but are not limited to; ATV's, UTV's, Bicycles, Motorcycles and Boats.

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23. **Spotter:** A human backer/spotter is an easy way to reduce and possibly eliminate accidents while backing up. Whenever a piece of apparatus needs to back up – whether it's 2 feet or 20 – a spotter must stand behind the apparatus and guide the driver with hand signals to prevent it from striking anything. By using a backer/spotter, the driver of the apparatus gains a whole new set of eyes that he or she can utilize to help him maneuver safely.
- i. A spotter must be easily identifiable; they must be wearing proper reflective clothing so they're visible to all motorists.
 - ii. A portable radio should be used so they can relay instructions or simply say "stop!" if necessary.
 - iii. The use of a flashlight at night is also very beneficial.
 - iv. Anytime the driver loses sight of the spotter they should stop backing up.
24. **Tongue Weight:** The weight on the coupler when a trailer is fully loaded and ready to go. In general, you want to try for about 10% of the total trailer weight to be carried on the tongue. Most receivers and other hitches assume that the tongue weight will be about 10%.
25. **UAV** - Unmanned Aerial Vehicle
26. **UTV:** Utility Terrain Vehicle
27. **Weight Distributing Hitch:** A weight distributing hitch (also called a "load equalizing hitch") is designed to distribute the tongue weight of a trailer across all four wheels of the tow vehicle. Weight distributing hitches are used in the same Class 3-5 receivers as a weight carrying hitch. Any vehicle with a Class 3-5 receiver can use a weight distributing hitch. With a weight distributing hitch, your entire towing rig will ride level and be more stable on the road. Weight distributing hitches are also adjustable for different trailer heights. You can also add sway controllers to a weight distributing hitch. While WD hitches can help reduce some sway, they are not sway controls.

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401.17.05 SERV Minimum Driving and Training Requirements

In addition to being an "Authorized Driver", an employee must complete the following additional training to operate a special emergency response vehicle or tow a trailer:

Apparatus/Vehicle Type	Additional Minimal Training Requirement
ATV & UTV	<ul style="list-style-type: none">• ATV Safety Institute - ATV/UTV Rider's Course• Annual Refresher Training
Patrol Bicycle	<ul style="list-style-type: none">• IPMBA - EMS Cyclist Course• Annual Refresher Training
Patrol/Rescue Boat	<ul style="list-style-type: none">• USCG - Boater's Safety Course• CCSO Marine Unit - Aforementioned plus Basic Boat Crewman's Course - <i>Crewman</i>• CCSO Marine Unit - Aforementioned plus Basic Boat Operator's Course - <i>Boat Operator</i>• USCG - Aforementioned plus Boat Captain's School - <i>Boat Captain (w/in 3 years of making the Marine Unit)</i>
Patrol Motorcycle	<ul style="list-style-type: none">• Valid Maryland Motorcycle Endorsed License• FLETC - Police Motorcycle Operator's Training• Annual Refresher Training
Trailer (any type)	<ul style="list-style-type: none">• DES - Basic Trailer Operations and Tow Course• Annual Refresher Training
UAV	<ul style="list-style-type: none">• Completed FAA 107 Course and Exam• UAV Flight Operations and Safety Procedures Course• Annual Refresher Training

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401.17.06 Responsibilities

Managers and Supervisor's	<ul style="list-style-type: none">• Ensure that each vehicle operator is competent to operate the vehicle safely, as demonstrated by successful completion of training and evaluation.• Prior to permitting an employee to operate a vehicle (except for training purposes), ensure that each operator has successfully completed the training required and possesses a valid driver's license.• Ensure that trainers have the knowledge, training, and experience to train vehicle operations on the type vehicle to be used.• Ensure that required training is provided and training records are maintained.• Revoke or suspend employee's operating privileges, as required.• Designate qualified employees for training.• Ensure that regular maintenance and inspections are performed on said vehicles.• Ensure use of required personal protective equipment and safety controls.• Enforce safe operation.
Trainers	<ul style="list-style-type: none">• Possess the knowledge, training, and experience necessary to train operators and evaluate their competence.• Train vehicle operators and evaluate their competence.• Attend a train-the-trainer course, if required.• Document training of vehicle operators.• Enforce safe operation.
Vehicle Operators	<ul style="list-style-type: none">• Complete required training prior to vehicle operation.• Review operator manual prior to vehicle use.• Complete pre-use inspections prior to each shift.• Insure all riders are wearing the appropriate level of PPE and safety restraints.• Operate the vehicle in a safe and responsible manner.• Follow policy.



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401.17.07 SERV PPE Selection

In addition to prescribed PPE as indicated in the PPE Decision Matrix; vehicle operators, responders, passengers and patients will wear additional specific SERV PPE as indicated below:

Apparatus/Vehicle Type	Additional Indicated PPE Use
ATV & UTV	<ul style="list-style-type: none">• ANSI approved safety helmet - Operator and Passengers• ANSI approved safety goggles - Operator and Passengers• NFPA approved face shield - Patients
Patrol Bicycle	<ul style="list-style-type: none">• DOT approved bicycle helmet - Operator• ANSI approved reflective ensemble - Operator
Patrol Boat	<ul style="list-style-type: none">• USCG approved personal floatation device - All Personnel• USCG approved dry suit (weather indicative) - All Personnel• USCG approved personal rescue strobe - All Personnel
Patrol Motorcycle	<ul style="list-style-type: none">• DOT approved motorcycle helmet - Operator• DOT approved motorcycle jacket - Operator• DOT approved motorcycle gloves - Operator• DOT approved motorcycle boots - Operator• DOT approved hands free communications device - Operator• DOT approved safety glasses - Operator
Trailer (any type)	N/A
UAV	N/A

401.17.08 ATV & UTV Operations

1. Prior to the use and operation of any ATV/UTV, the vehicle operator will perform a detailed safety inspection of the vehicle to make sure that all safety features on the vehicle (to include the trailer if applicable) are in good working order.
2. The vehicle operator and all passengers will wear seat belts while the vehicle is in operation.
3. The vehicle operator will insure that all personnel in the vehicle are wearing the proper level of PPE. It is the vehicle operator's responsibility for his/her crew's safety and well-being.
4. ATV/UTV operators are responsible for ignition keys for the period of time in which they are using the vehicle. Keys shall not be left in vehicles.
5. Each passenger of the vehicle must be have a seat in order to ride. Personnel without a seated position are not permitted to ride on the vehicle.



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6. Stunt driving and horseplay are prohibited while operating an ATV/UTV.
7. Pedestrians have the right-of-way at all times. ATV's and UTVs must yield to pedestrians at all times. SPEED IS TO BE REDUCED TO A MINIMUM WHEN CROSSING OR DRIVING ALONG SIDEWALKS, SO AS TO AVOID ACCIDENTS WITH PEDESTRIANS.
8. UTVs are not to be overloaded, i.e., carrying more passengers than seating provided or overloading the vehicle's recommended cargo carrying or load capacity.
9. If a patient is on board the UTV, an appropriately certified EMS provider WILL ride with the patient to provide medical care.
10. All patients will be outfitted with the appropriate level of PPE while riding on board the UTV.
11. Operators must park UTVs away from heavily traveled pedestrian areas or in designated parking areas. UTVs must not block access to fire extinguishers, standpipes, or emergency/fire exits. Do not park UTVs on sidewalks or block building entrances.
12. Operators transporting cargo must secure the load and position the load to prevent load shifting. Never load tailgates and avoid top-heavy loading.
13. UTVs are to be maintained in accordance with the manufacturer's guidelines. Only a qualified mechanic will repair a UTV when needed. The program is required to keep all preventative maintenance and repair records related to the UTV.

401.17.09 Boat Operations

1. Boat operations will be in accordance with all Federal, State and Local maritime laws and regulations.
2. Boat operations will also be in accordance with the *Charles County Marine Unit Standard Operating Procedures*.
3. While operating around water and especially on a watercraft all personnel shall wear the appropriate level of USCG approved PFD for their role and or mission.
4. All patients and or civilian riders shall wear a USCG approved PFD at all times.
5. While the vessel is in operation, the Captain of the vessel shall be the highest level of authority. All personnel regardless of rank shall abide by the commands of the vessel's Captain while underway.

401.17.10 Trailer & Tow Operations

1. Pre-Hitch Operations

- i. The operator of the tow vehicle shall perform a walk-around and safety inspection of both the tow vehicle and the trailer in tow.
- ii. The operator of the tow vehicle shall insure that the tow vehicle is equipped with the appropriate hitch and vehicle configuration for the trailer it will be towing.
- iii. The operator of the tow vehicle shall check that the ball on the hitch is the appropriate size for the trailer tongue.
- iv. The operator of the tow vehicle shall insure that both pins on the wiring harness of the tow vehicle match the electrical pins of the trailer in tow.



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2. Hitching Operations

- i. The operator of the tow vehicle shall back the tow vehicle to the trailer with the use of a spotter at all times. It is the responsibility of the spotter to safely guide the vehicle operator to the proper hitch position using predetermined sign language between driver and spotter.
- ii. The operator of the tow vehicle shall assure that the trailer tongue coupler is properly seated and secured by following these steps:

Step 1: Make sure that the coupler clamp lock is down and the release latch has hooked securely. Install a coupler safety pin or coupler lock if one is available. At minimum, make sure to use a coupler pin to keep the coupler lever from accidentally popping open. Completely stow or raise the trailer tongue jack.

Step 2: Check the hitch pin that holds the ball mount in the hitch receiver. Utilize a hitch pin clip in good condition or a hitch pin lock to hold the ball mount in place.

Step 3: Attach safety chains, crossing them under the trailer coupler. This helps to ensure that the coupler falls onto the crossed chains in the event of a breakaway.

Step 4: Connect the trailer light wiring to the vehicle's connector and check all lights, including the brake lights.

3. Towing Operations

- i. Place tow vehicle in "Tow/Haul" mode - on gear shifter.
- ii. Allow plenty of stopping and following distance - You need to allow much more following distance when trailering than while driving a single vehicle.
- iii. Be extra careful changing lanes - A blind spot is much larger while towing than driving a single vehicle.
- iv. Be patient with slower vehicles - Passing a slower car should be a rare occurrence when you're towing. You have to allow many times the distance normally required to pass another vehicle.
- v. Be gracious with faster vehicles - The best way to get down the road safely is to be extra courteous to faster traffic.
- vi. Don't pull in where you can't see out.
- vii. Breaking - Always allow plenty of distance for breaking.
- viii. While in tow during emergency responses - your maximum speed should not exceed ten (10) miles over the legal posted speed limit.



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401.17.11 UAV Operations

1. UAV operations shall be conducted in accordance with FAA flight regulations and within the policies and procedures as set forth in the *Charles County UAV Operations Plan*.
2. Only certified UAV pilots shall fly county UAV's.